

Lake District National Park

Forecast valid from 00:00 on Wednesday 18 Jan 2023 until 23:59 on Thursday 19 Jan 2023

Forecast Issued on Tuesday 17 Jan 2023 at 14:14

Confidence: High for the cold conditions continuing through the next few days then a transition to milder weather over the weekend. The details and timing of the transition will be the main forecasting challenge.

Headline for Wednesday 18 Jan 2023: Dry, bright and cold. Windy on the tops with a severe wind chill.

Mountain weather hazards on Wednesday 18 Jan 2023

Blizzards

No Likelihood

Heavy persistent snow

No Likelihood

Storm force winds

No Likelihood

Gales

No Likelihood

Severe chill effect

High Likelihood

Poor visibility

No Likelihood

Thunderstorms

No Likelihood

Heavy persistent rain

No Likelihood

Strong sunlight

Low Likelihood

Weather and chance of precipitation at 800m							
Time							
00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00
							
Partly cloudy (night)	Partly cloudy (night)	Partly cloudy (night)	Sunny intervals	Sunny intervals	Sunny intervals	Clear night	Clear night
Precipitation probability							
20%	20%	<05%	<05%	<05%	<05%	<05%	<05%

Forecast for Wednesday 18 Jan 2023

Weather: Clear spells overnight with isolated snow showers dying out. A dry day with sunny spells then a clear evening with a widespread frost. Feeling bitterly cold with strong winds on the tops.

Chance of cloud-free hill tops above 800m: 90%.

Low cloud and visibility: Excellent visibility during the day. A few patches low cloud above 400m in the early hours.

Forecast for Wednesday 18 Jan 2023

Height (m)	Wind Speed mean/gusts (mph)					Wind Direction (blowing from)			
	00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00	00:00
900	26/32 NW	32/39 NW	35/43 NW	32/40 NW	27/36 NW	28/36 N	28/36 N	25/32 NW	21/28 NW
600	19/27 W	23/32 NW	24/34 NW	23/34 NW	19/27 NW	21/30 NW	19/31 NW	17/27 NW	15/23 NW
300	8/23 NW	9/27 NW	9/30 NW	9/28 NW	10/27 NW	11/29 NW	9/27 NW	6/22 NW	5/19 NW
Valley	7/22 NW	9/27 NW	10/29 NW	11/27 NW	12/26 NW	11/27 NW	11/27 NW	9/23 NW	7/20 NW

Height (m)	Temperature / Feels Like (°C)								
	00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00	00:00
900	-5/-14	-5/-14	-5/-15	-4/-14	-4/-13	-4/-13	-5/-14	-6/-14	-6/-14
600	-3/-10	-3/-10	-3/-11	-3/-10	-2/-9	-2/-9	-3/-10	-4/-11	-4/-11
300	-0/-4	-0/-5	-1/-5	-0/-5	1/-4	1/-4	-1/-6	-2/-6	-2/-6
Valley	2/-1	2/-2	2/-2	2/-2	4/-0	4/-0	2/-2	1/-3	1/-2
Freezing Level*	200m	200m	200m	200m	300m	300m	100m	00m	00m

*Level above which ground is expected to be frozen/snow is expected to settle.

Meteorologist's View

Feeling bitterly cold especially in exposure to the strong northwesterly winds on higher slopes. Strong glare off lying snow in sunny spells.

Forecast for Thursday 19 Jan 2023

Weather: Clear spells and widespread frost overnight. Mostly cloudy with a few snow showers in the morning then a largely dry and bright afternoon. A clear evening with another widespread frost.

Maximum wind: West or Northwest 10 to 15mph, gusts 25mph.

Chance of cloud-free hill tops above 800m: 40% in morning becoming 80% in afternoon.

Low cloud and visibility: Mainly very good visibility. A few patches of low cloud in the morning, mostly over western fells in any showers.

Temperature: **Valleys:** Minus 2C rising to 3C.
At 800m: Minus 5C rising to Minus 1C during daytime.
Freezing level: Valley level, rising to 300m for a time during daytime.

Ground Conditions Supplement

Date: Tuesday 17 January 2023. Location: Helvellyn summit at 12:35. Full report: There is a skittering of snow down to valley level and, with freezing temperatures at virtually all levels little to no daytime thaw of the existing snow. Snow depth rises with height although actual depth encountered varies considerably from little on windswept areas to deep drifts able to swallow a 70cm ice axe (although such depth is the exception) with an extremely rough average of 10 to 15cm at 900m. The majority of the snowpack was soft powder and breaking trail through the deeper drifts was arduous and energy sapping. Conversely, on some exposed pitched paths below 600m the snow had been blown away and there was some dry rock. The windswept summit plateau was covered in harder snow with soft snow in more sheltered spots. Given the sharp overnight frost, there was ice at all levels; however, the more problematic of which was often located at lower elevations along drainage lines where there has been a thaw / freeze. On popular routes there was also some harder compacted snow and ice. With the changes in wind direction, cornices (snow overhangs) can exist above many steep aspects but especially those facing north and east – such as along Helvellyn's summit plateau. These had noticeable cracks (some filled with soft powder snow) and are extremely unstable; therefore please keep off any such snow covered edges and advise those with less experience to do likewise. With a summit temperature around midday of minus 5 and windchill (what the temperature actually feels like) an even chillier minus 15 degrees C, full winter clothing (waterproofs, extra warm layers, hat & gloves), mountain boots and equipment including a torch, map and compass are all essential to safely enjoy the fells. Low cloud when combined with deep snow obscuring ground features (including steep drops) necessitates excellent navigational skills. Crampons and ice axe (plus experience in winter mountaineering) are essential for those attempting, or traversing, steep & exposed routes (such as the Helvellyn edges). Microspikes and trekking poles are strongly recommended for any walkers heading above the snowline owing to the amount of ice and potential to encounter harder and compacted snow. Goggles are a useful addition to the rucksack to cope with any snow showers or windblown snow/hail. Temperature: minus 5.3 C, Maximum wind speed 22.7 mph, Wind chill: minus 15.3C, Average wind speed: 19.6 mph.

Issued at: 1414 on Tue 17 Jan 2023